Peaceful Nuclear Cooperation

U.S. Support for NPT Article IV

UNITED STATES & SLOVENIA

hrough the International Atomic Energy Agency (IAEA), the United States contributes to the work of many countries using nuclear materials and technology for peaceful purposes. In recent years, U.S. support has focused on achieving tangible and lasting benefits in fields that are vital to human development, including agriculture, human health, water resource management, and human resource development. Since 2000, the IAEA has approved and funded \$3,631,625, including \$255,798 2013. under its Technical Cooperation (TC) program for projects in Slovenia.







In addition to the United States' longstanding support for the IAEA's activities to promote peaceful nuclear applications, at the 2010 NPT Review Conference, the United States announced a \$100 million USD effort to expand this support over the next five years. The United States has pledged \$50 million towards the IAEA's Peaceful Uses Initiative (PUI), focusing on human health, food security, water resource management, and nuclear power infrastructure development.

The United States views its support for peaceful uses of nuclear energy, to which all NPT Parties are entitled, as a critical part of its broader effort to strengthen the IAEA and the global nuclear nonproliferation regime. The U.S. has already designated over \$22 million for IAEA projects benefitting over 120 countries, including Slovenia, for which funding was previously unavailable. The United States is working with partners to reach the \$100 goal, and welcomes commitments of over \$12 million from Japan, the Republic of Korea, New Zealand, the Czech Republic, Hungary, Sweden, Australia, France, Indonesia, Brazil, Italy, the UK and Kazakhstan.

NUCLEAR ENERGY

Due to the continued increase in fossil fuel prices, concerns about secure supply and an increasing awareness of the importance of greenhouse gas reductions, several countries are considering expanding their nuclear power programs or introducing nuclear energy for the first time. This requires

Nuclear power plant under construction.

2. Exploring ways to secure radioactive waste for generations to come. Credit: Comet

Credit: IAEA

3. Verifying a load of highly enriched uranium fuel before it is brought back to Russia.
Credit: Dean Calma/IAEA

careful planning, preparation and investment in sustainable infrastructure to provide the legal, regulatory, technological, and human Slovenia is resources necessary. therefore participating in a regional TC project sponsored by the United States to strengthen national and regional infrastructures for the planning and development of nuclear power programs. The project will ensure that any Member State planning the introduction or expansion of nuclear energy has a complete understanding of the range of issues and activities to be addressed before implementation of a nuclear power project.

NUCLEAR SAFETY

Disused facilities and contaminated because of activities involving the use of radioactive material exist worldwide and many pose continuing health risks to adjacent communities and, potentially, to the wider public. Slovenia is currently participating in an interregional TC project sponsored by the United States that will provide support and assistance toward the efficient clean-up of radioactive contaminated facilities and sites. Through this project, barriers to the acceptance of continued or expanded applications of peaceful uses of nuclear technology can, to some extent, be removed.

Radioactive sources widely employed for beneficial purposes throughout the world, in areas including industry, medicine, and agriculture. However, accidents involving radioactive sources have raised awareness of the safety and security risks created by sources that are outside effective control. For many years the IAEA has been helping Member States strengthen national management and regulatory infrastructures to ensure that radioactive sources are appropriately

regulated at all times, and Slovenia is participating currently in interregional TC project sponsored by the United States to strengthen cradleto-grave control of radioactive sources in the Mediterranean region.

Slovenia is also participating in regional TC projects through which Member States will improve their comprehensive regulatory infrastructure to establish and develop adequate and effective regulatory mechanisms, and harmonize and streamline national capabilities for regulatory control in full compliance with the IAEA Safety Standards and international requirements.

NUCLEAR FUEL

Recently, several countries, including Slovenia, participated in a U.S.sponsored regional TC project to convert research reactor cores from highly enriched uranium (HEU) to low enriched uranium (LEU) and facilitate the return of highly enriched and lowenriched uranium to the country of project origin. The assisted participating countries with research reactors to repatriate, manage, or dispose of their fresh or irradiated fuel, and supported the Russian Research Reactor Fuel Return program and the Global Threat Reduction Initiative.

AGRICULTURE

The Mediterranean fruit fly causes major damage by reducing fruit and vegetable production, increasing insecticide use, and hindering international fruit and vegetables trade. Slovenia is working through a regional TC project sponsored by the United States enhance agricultural to

productivity in the Balkans and Eastern Mediterranean by supporting fruit fly pest prevention and management. This will be accomplished through sharing technical knowledge and providing support to selected fruit fly suppression programs in which the use of the sterile insect technique (SIT), as part of an area-wide integrated management approach, has already proven to be technically and economically feasible.

HUMAN RESOURCES

To contribute to Member States' manpower development, the IAEA awards individual fellowships and organizes group training courses.

Since 2000, the United States has hosted multiple training courses that included Slovenian participants in fields such as risk informed decision making, restructured energy markets, fuel management, waste disposal, decommissioning, nuclear security, and management systems. Training was also provided in the U.S. through the IAEA Fellowship Program to seven Slovenes, two of which were sponsored by the United States, in the fields including general atomic energy development, power reactors, nuclear medicine imaging, radiation protection, medical exposure control, knowledge management.

Additionally, since 2000, 34 U.S. experts have traveled to Slovenia to collaborate through various IAEA Technical Cooperation projects. Examples of some topics include safety management, decommissioning, instrumentation and control, radiological emergency.

In June 2000, the U.S. Nuclear Regulatory Commission (NRC) signed an agreement to collaborate with Slovenia regarding severe accident









- Metal seals show evidence of any unauthorized attempts to access secure material. Credit: Dean Calma/IAEA
- Remedial measures rendered fields safe for cultivating. Credit: Petr Pavlicek/IAEA
- Standard maintenance check. Credit: Arthus-Bertrand
- IAEA fellows receive training in plant breeding. Credit: Dean Calma/IAEA

hrough bilateral efforts, the United States has provided direct support to Member States through various collaborative projects such as the exchange of information, expert visits, and training of personnel.

research.